Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended): A reaction chamber comprising:

- a first container consisting essentially of a wall delimiting a volume which is substantially closed, apart from at least one first orifice formed in said wall,

- a second container consisting essentially of a wall delimiting a volume which is substantially closed, apart from a second orifice connecting the second container to a first end of a conduit having an open second end,

in which:

- said first and second containers are integral,

- said second container and said conduit are integral,

- said open second end is inside the first container,

said chamber being capable of occupying two positions, namely

- a first position in which said first orifice is in an upper position relative to ~~the~~ other parts of the first container, and said second orifice is in a lower position relative to ~~the~~ other parts of the second container, and

- a second position in which said first orifice is in a lower position relative to the other parts of the first container, said second orifice being in an upper position relative to the other parts of the second container, and said open end of the conduit is aligned with and at a distance from said first orifice, and the configuration of said chamber being such that when the chamber is rotated in a first predetermined direction from said first position to said second position, any liquid contained in said second container remains in the second container without being able to flow through said conduit to said open end, and when the chamber is rotated in a second predetermined direction, from said first position to said second position, any liquid contained in said second container flows through said conduit and reaches said open end.

Claims 2-13 (Canceled)

14. (Previously presented): The reaction chamber as claimed in claim 1, in which said second container and the conduit are inside the first container.

15. (Previously presented): The reaction chamber as claimed in claim 1, in which said conduit has at least one bend.

16. (Previously presented): The reaction chamber as claimed in claim 15, in which said conduit comprises a system of two bends in the shape of a Z.

17. (Previously presented): The reaction chamber as claimed in claim 1, in which said conduit comprises a first part from the orifice of the second container to a first bend at a distance from the second orifice, a second part from the first bend to a second bend, then a third part from the second bend to the open end, and in which, in said first position, said first bend occupies an upper position relative to the second orifice and said second end occupies a lower position relative to said first bend.

18. (Currently amended): The reaction chamber as claimed in claim 16, in which the branches of the bend or bends are inclined relative to ~~the~~ vertical in said first and second positions of said chamber.

19. (Currently amended): The reaction chamber as claimed in claim 17, in which the branches of the bend or bends are inclined relative to ~~the~~ vertical in said first and second positions of said chamber.

20. (Previously presented): The reaction chamber as claimed in claim 1, further comprising a first outer tube, one end of which is connected to said first orifice, said tube occupying a vertical position above the first container in said first position of the chamber, and below the first container in the second position.

21. (Previously presented): The reaction chamber as claimed in claim 20, further comprising a second tube, one end of which opens into the first conduit and the other end of which is outside the chamber, said second tube being sealable in its part outside the chamber.

22. (Previously presented): The reaction chamber as claimed in claim 21, in which said containers and said tubes and conduit form a closed assembly containing a first glass in the first container and a second glass, of different index, in the second container.

23. (Previously presented): The reaction chamber as claimed in claim 22, in which said containers, conduit, and tubes are made of silica or pyrex glass.

24. (Withdrawn): A method for preparing an optical fiber preform or an optical fiber with a cladding glass and a core glass, of different indices, with the aid of a reaction chamber, the reaction chamber comprising:

- a first container consisting essentially of a wall delimiting a volume which is substantially closed, apart from at least one first orifice formed in said wall,

- a second container consisting essentially of a wall delimiting a volume which is substantially closed, apart from a second orifice connecting the second container to a first end of a conduit having an open second end,

in which:

- said first and second containers are integral,

- said second container and said conduit are integral,

- said open second end is inside the first container,

said chamber being capable of occupying two positions, namely

- a first position in which said first orifice is in an upper position relative to the other parts of the first container, and said second orifice is in a lower position relative to the other parts of the second container, and

- a second position in which said first orifice is in a lower position relative to the other parts of the first container, said second orifice being in an upper position relative to the other parts of the second container, and said open end of

the conduit is aligned with and at a distance from said first orifice, and the configuration of said chamber being such that when the chamber is rotated in a first predetermined direction from said first position to said second position, any liquid contained in said second container remains in the second container without being able to flow through said conduit to said open end, and when the chamber is rotated in a second predetermined direction, from said first position to said second position, any liquid contained in said second container flows through said conduit and reaches said open end;

the method comprising:

introducing the cladding glass into the first container and the core glass into the second container, the chamber occupying said first position or a similar position,

evacuating the chamber,

heating the chamber to a sufficient temperature for the two glasses to be liquid,

rotating the chamber in the first predetermined direction, from said first position to said second position, so that the cladding glass flows under gravity toward then through the first orifice,

returning the chamber to said first position, and

after a predetermined time, rotating the reaction chamber in said second predetermined direction, from the first position to the second position, so that the core glass which has remained liquid in the second container passes through the second orifice, enters the conduit, and reaches the open end through which it flows under gravity and passes through said first orifice.

25. (Withdrawn): The method as claimed in claim 24, wherein the chamber further comprises a first outer tube, one end of which is connected to said first orifice, said tube occupying a vertical position above the first container in said first position of the chamber, and below the first container in the second position.

26. (Withdrawn): The method as claimed in claim 25, in which:

after rotating the chamber in said first predetermined direction, the cladding glass passes through the first orifice and fills said outer tube, while the core glass remains confined in the second container, and

the method further comprises:

cooling said outer tube for a predetermined time so that a part of the cladding glass close to the wall of the outer tube solidifies, while the part of the cladding glass in the axial region of the tube is still liquid,

returning the chamber from the second position to said first position, so that the part of the cladding glass which is still liquid flows under gravity into the first container, while the solidified part of the cladding glass remains in the tube, the axial part of which is empty,

wherein after rotating the chamber in said second predetermined direction, the core glass which has remained liquid in the second container flows along the conduit then falls through the first orifice into the axial part of the tube, and

optionally converting the obtained preform into an optical fiber.